

REMARKS

This is intended as a full and complete response to the Office Action dated August 25, 2003, having a shortened statutory period for response set to expire on November 25, 2003. Claims 1 - 32 remain pending in the application and are shown above. Claims 17-26 are subject to restriction and/or election requirement. Claims 17-26 have been cancelled without prejudice by Applicant. Claims 1 - 8, 11-16 and 27-32 were considered by the Examiner and stand rejected. Claim 10 is objected to and claim 9 are indicated to be allowable by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below. Applicants believe that no new matter has been introduced in this response.

Claims 1, 2, 3, 4, 8, 15, 27, and 28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Gray et al.*, U.S. Patent No. 6,008,405. The Examiner asserts that *Gray et al.* discloses the aspects of the invention recited in claims 1, 2, 3, 4, 8, 15, 27, and 28. Applicants respond to this rejection

Gray et al. discloses a tin based stabilizer composition obtained by aging of an alkaline solution of a tin compound and a phosphorus containing compound.

Gray et al. does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety for oxidizing the metal and a second moiety for minimizing overetching the metal, a stannate salt for stabilizing the composition, a corrosion inhibitor and a base, as recited in claim 1 and claims dependent thereon.

Gray et al. does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety comprising a peroxide group selected from the group of a peroxycarboxylic acid group, a peroxycarboxylate group, and combinations thereof and a second moiety comprising an alkyl group, an alkyl group derivative, an aryl group, an aryl group derivative, or combinations thereof, a stannate salt, a corrosion inhibitor, and a base, as recited in claim 27, and claims dependent thereon. Withdrawal of the rejection is respectfully requested.

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gray et al.*, U.S. Patent No 6,008,405 in view of *Hirabayashi et al.* (U.S. Patent No. 6,046,110). The Examiner asserts that it would have been obvious to modify *Gray et al.* by the using

a polyethylene glycol surfactant as taught by *Hirabayashi et al.* Applicants respectfully respond to this rejection.

Gray et al. is described above. *Hirabayashi et al.* discloses a copper polishing composition with a water-soluble organic acid capable of forming a copper complex compound on the substrate surface and does not dissolve at all of the copper when the substrate is immersed in the composition. *Hirabayashi et al.* does not suggest or motivate the use of a stannate salt or a corrosion inhibitor in a polishing composition.

Thus, the combination of *Gray et al.* and *Hirabayashi et al.* does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety for oxidizing the metal and a second moiety for minimizing overetching the metal, a stannate salt for stabilizing the composition, a corrosion inhibitor and a base, wherein the second moiety comprises an alkyl group, an alkyl group derivative, an aryl group, an aryl group derivative, or combinations thereof, selected from the group of polyethylene glycol, polyethylene glycol derivatives, benzene, benzene derivatives, and combinations thereof, as recited in claim 5. Withdrawal of the rejection is respectfully requested.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gray, et al.*, U.S. Patent No. 6,008,405, in view of *Kaufman* (U.S. Patent No. 6,126,853). The Examiner asserts that it would have been obvious to modify *Gray et al.* by the using a film forming agent as taught by *Kaufman*. Applicants respectfully respond to this rejection.

Gray et al. is described above. *Kaufman* discloses a copper polishing composition comprising a film forming agent, urea hydrogen peroxide, a complexing agent, an abrasive, and an optional surfactant.

Claim 11 has been amended and the Applicants respectfully suggest the rejection is now moot. Alternatively, the combination of *Gray et al.* and *Kaufman* does not teach, show, or suggest *Gray et al.* does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety for oxidizing the metal and a second moiety for minimizing overetching the metal, a stannate salt for stabilizing the composition, a corrosion inhibitor and a base, as recited

in claim 11, and claims dependent thereon. Withdrawal of the rejection is respectfully requested.

Claims 6, 7, 13, 14, 29, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gray* as applied to claim 1 and 27 above, and further in view of *Kimura*, U.S. Patent No. 5,869,392. The Examiner asserts that it would have been obvious to modify *Gray et al.* by the using *Kimura* to achieve an optimum value of a result effective variable. Applicants respectfully respond to this rejection.

Gray et al. is described above. *Kimura* discloses a method for forming high reliability contacts by first planarization layer on a lower height and then planarization over the entire surface.

The combination of *Gray et al.* and *Kimura* does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety for oxidizing the metal and a second moiety for minimizing overetching the metal, a stannate salt for stabilizing the composition, a corrosion inhibitor and a base, as recited in claim 1, and claims dependent thereon.

The combination of *Gray et al.* and *Kimura* does not teach, show, or suggest a composition for polishing a metal, the composition comprising a reagent comprising a first moiety comprising a peroxide group selected from the group of a peroxycarboxylic acid group, a peroxycarboxylate group, and combinations thereof and a second moiety comprising an alkyl group, an alkyl group derivative, an aryl group, an aryl group derivative, or combinations thereof, a stannate salt, a corrosion inhibitor, and a base, as recited in claim 27, and claims dependent thereon. Withdrawal of the rejection is respectfully requested.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the claimed aspects of the invention. Having addressed all issues set out in the office action, applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Brian K. Hrna
Registration No. 41,852
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Agent for Applicant(s)